

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference GB040002	FOR FURTHER ACTION		See item 4 below
International application No. PCT/EP2005/050896	International filing date (<i>day/month/year</i>) 01 March 2005 (01.03.2005)	Priority date (<i>day/month/year</i>) 12 March 2004 (12.03.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant INTERNATIONAL BUSINESS MACHINES CORPORATION			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report 13 September 2006 (13.09.2006)</p> <p>Authorized officer Yolaine Cussac</p> <p>e-mail: pt11@wipo.int</p>
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PATENT COOPERATION TREATY

REC'D 22 SEP 2005

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From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

2a/9

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing

(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/050896

International filing date (day/month/year)
01.03.2005

Priority date (day/month/year)
12.03.2004

International Patent Classification (IPC) or both national classification and IPC
G06F9/50

Applicant
INTERNATIONAL BUSINESS MACHINES CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050896

Box No. 1 Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material:

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing:

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050896

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
Industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-18
	No: Claims	
Inventive step (IS)	Yes: Claims	1-18
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-18
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

- 1 Reference is made to the following documents:
D1: "IBM WebSphere V4.0 Advanced Edition: Scalability and Availability (Partial)"
(2002-05),
D2: US-A-5 349 656 (1994-09-20),
D3: "Maintaining affinity of message groups" (2003-06-13).

- 2 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):

A method for affinity management in a distributed computer system (e.g. session affinity, p.144), the method comprising: providing an identifier for each of a plurality of addressing entities (request of a session using e.g. SSL ID, p. 144, 4th paragraph and p.146f), [...]; [...] [...].

The subject-matter of claim 1 differs from this known method in

- 1) that the identifier for each member of a group of addressing entities with an affinity is the same group identifier;
- 2) determining the number of service providers which are available to be addressed by an addressing entity to provide an instance of a service;
- 3) managing the distribution of addressing entities to service providers by the following method: applying a hash function to the identifier of an addressing entity to obtain a standard integer; dividing the standard integer by the number of service providers and obtaining the modulus; selecting a service provider by reference to the modulus; sending the addressing entity to the instance of the service provided by the selected service provider.

The subject-matter of claim 1 seems therefore new (Article 33(2) PCT).

- 2.1 The combination of the features of independent claim 1 seems to be neither known

from, nor rendered obvious by, the available prior art as presently known. The reasons are as follows:

While the first feature is obvious for the person skilled in the art when realizing session affinity, i.e. every request of one session sent to the same server, and also the second feature does not involve an inventive step when listing all available servers, the problem to be solved by the third feature can be defined as

how to select a server while guaranteeing affinity.

The solution to this problem as proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

the method of choosing a server as described in claim 1 is neither known from, nor rendered obvious by, the available prior art as presently known.

- 2.2 Claims 2-8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 2.3 The same reasoning as in the previous sections applies to claims 9-17 and 18, which are also considered new (Article 33(2) PCT) and/or as involving an inventive step (Article 33(3) PCT) with regard to the available prior art as presently known.